





February 2021 Monthly Rainfall and Vegetation Cover (NDVI) (Issued March 31, 2021)

Highlights

February is part of the typically dry Jilaal (January-March) season across Somalia. Dry and harsh weather conditions characterized by strong winds and high temperatures persisted during February 2021 across the country. Most rainfall stations did not record any rainfall amount except for a few pockets within Lower Juba, Middle Juba, Gedo and Hiraan regions (as shown in Map 2 – Map 5) that recoreded light showers during the last week of the month.

Satellite imagery from TAMSAT continue to indicate largely dry weather conditions across Somalia with localize rainfall in parts Lower Juba. Vegetationcover, measured through the Normalized Difference Vegetation Index (NDVI), continued to deteriorate in large parts of southern Somalia, especially in Bay, Middle and Lower Juba, Middle and Lower Shabelle reflecting a large decrease in vegetation cover.

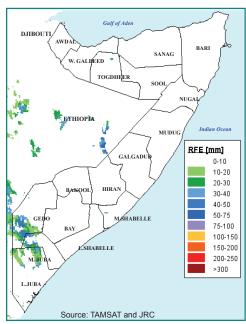
Significant degradation of pasture and decrease in water availability have been reported in most parts of the country due to prevailing dry weather conditions and high temperatures. Temporary water sources and catchments in traditional grazing areas have been significantly depleted. Consequently, pastoralists are moving towards villages with permanent boreholes; leading to sharp increases in water prices, especially in northern parts of the country. Water trucking for livestock has been reported in most parts of northern regions. This puts undue pressure on poor pastoralists as they have limited resources to cover water trucking expenses or expenses for migration to distant grazing areas.

There have also been little to no rainfall in most parts of Somalia during the month of March and forecasts for the next two weeks (through mid-April) also indicate continued dry coditions (no rainfall). This is likely to worsen ongoing drought conditions in many parts of Somalia and further threatens both pastoral and agropastoral livelihoods.

Map 1:February 2021 Monthly Rain Gauge Data (mm)



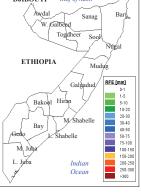
Map 2: February 2021 Monthly Rainfall Estimates (mm)



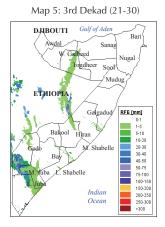
February 2021: Dekadal Rainfall Estimates (RFE) Progression

DJIBOUTI Gulf of Ad

Map 3: 1st Dekad (1-10)



Map 4: 2nd Dekad (11-20) DJIBØUTI Gulf of Aden ETHIOPIA Bakoo Bay Ocean



February 2021: Dekadal Vegetation Cover (NDVI) Progression Map 7: 2nd Dekad (11-20)

Map 6: 1st Dekad (1-10)

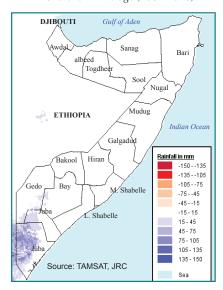




Map 8: 3rd Dekad (21-30)



Map 9: February 2021 Rainfall Difference from Short Term Average (2001-2020)



Map 10: February 2021 NDVI Absolute Difference from Short Term Average (1999- 2020)

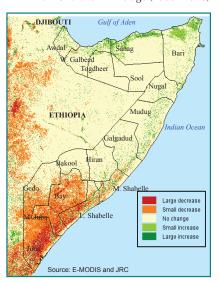


Table 1: Observed rain gauge data compared to Short term averages - STA (February 2021)

Northern Regions

Southern Regions

Northern Regions										
Station Name	Region	dek 1	dek 2	dek 3	Feb 21	STA				
Borama	Awdal	0.0	0.0	0.0	0.0	21.0				
Qulenjeed	Awdal	0.0	0.0	0.0	0.0	19.0				
Gebilley	Wogooyi Galbeed	0.0	0.0	0.0	0.0	6.0				
Malawle	Wogooyi Galbeed	0.0	0.0	0.0	0.0	11.0				
Wajaale	Wogooyi Galbeed	0.0	0.0	0.0	0.0	11.0				
Hargeisa	Wogooyi Galbeed	0.0	0.0	0.0	0.0	11.0				
Daraweyne	Wogooyi Galbeed	0.0	0.0	0.0	0.0	10.0				
Cadaadley	Wogooyi Galbeed	0.0	0.0	0.0	0.0	9.0				
Dilla	Wogooyi Galbeed	0.0	0.0	0.0	0.0	14.0				
Aburin	Wogooyi Galbeed	0.0	0.0	0.0	0.0	12.0				
Dhubato	Wogooyi Galbeed	0.0	0.0	0.0	0.0	9.0				
Baligubable	Wogooyi Galbeed	0.0	0.0	0.0	0.0	11.0				
Berbera	Wogooyi Galbeed	0.0	0.0	0.0	0.0	0.0				
Burao	Togdheer	0.0	0.0	0.0	0.0	4.0				
Sheikh	Togdheer	0.0	0.0	0.0	0.0	13.0				
Odweyne	Togdheer	0.0	0.0	0.0	0.0	8.0				
Buadodle	Togdheer	0.0	0.0	0.0	0.0	4.0				
Eeerigavo	Sanaag	0.0	0.0	0.0	0.0	48.0				
Elafweyn	Sanaag	0.0	0.0	0.0	0.0	4.0				
Caynabo	Sool	0.0	0.0	0.0	0.0	4.0				
Xudun	Sool	0.0	0.0	0.0	0.0	3.0				
Taleex	Sool	0.0	0.0	0.0	0.0	3.0				
Bossasso	Bari	0.0	0.0	0.0	0.0	0.0				
Qardo	Bari	0.0	0.0	0.0	0.0	1.0				
Dangoroyo	Bari	0.0	0.0	0.0	0.0	2.0				
Ballidhin	Bari	0.0	0.0	0.0	0.0	1.0				
Alula	Bari	0.0	0.0	0.0	0.0	0.0				
Bandarbeyla	Bari	0.0	0.0	0.0	0.0	1.0				
Iskushuban	Bari	0.0	0.0	0.0	0.0	0.0				
Garowe	Nugaal	0.0	0.0	0.0	0.0	3.0				
Eyl	Nugaal	0.0	0.0	0.0	0.0	5.0				
Burtnile	Nugaal	0.0	0.0	0.0	0.0	2.0				
Galdogob	Mudug	0.0	0.0	0.0	0.0	2.0				
Jarriban	Mudug	0.0	0.0	0.0	0.0	2.0				
Galkayo	Mudug	0.0	0.0	0.0	0.0	0.0				

Station Name	Region	dek 1	dek 2	dek 3	Feb-21	STA
Hudur	Bakool	0.0	0.0	0.0	0.0	0.0
Elbarde	Bakool	0.0	0.0	0.0	0.0	0.0
Baidoa	Bay	0.0	0.0	0.0	0.0	3.0
Diinsor	Bay	0.0	0.0	0.0	0.0	3.0
Bardaale	Bay	0.0	0.0	0.0	0.0	2.0
BurHakaba	Bay	0.0	0.0	0.0	0.0	4.0
Wanleweyne	Bay	0.0	0.0	0.0	0.0	0.0
Luuq	Gedo	0.0	0.0	0.0	0.0	1.0
Bardheere	Gedo	0.0	0.0	0.0	0.0	6.0
Belet weyne	Hiraan	0.0	0.0	0.0	0.0	0.0
Bulo burti	Hiraan	0.0	0.0	0.0	0.0	3.0
Mataban	Hiraan	0.0	0.0	0.0	0.0	1.0
Balad	Lower Shabelle	0.0	0.0	0.0	0.0	1.0
Mogadishu	Banadir	0.0	0.0	0.0	0.0	2.0
Bualle	Middle juba	0.0	0.0	0.0	0.0	1.0
Jowhar	Middle Shabelle	0.0	0.0	29.0	29.0	0.0

*indicates missing data

Monthly rainfall and NDVI perfomance maps

The Mapped NDVI and RFE above represent the differences from Long Term Mean.E-MODIS NDVI is presented as absolute difference from Long Term Mean for the same period (current - long term mean), while TAMSAT-RFE is presented as the relative difference from Long Term Mean (Current*100)/LTM.

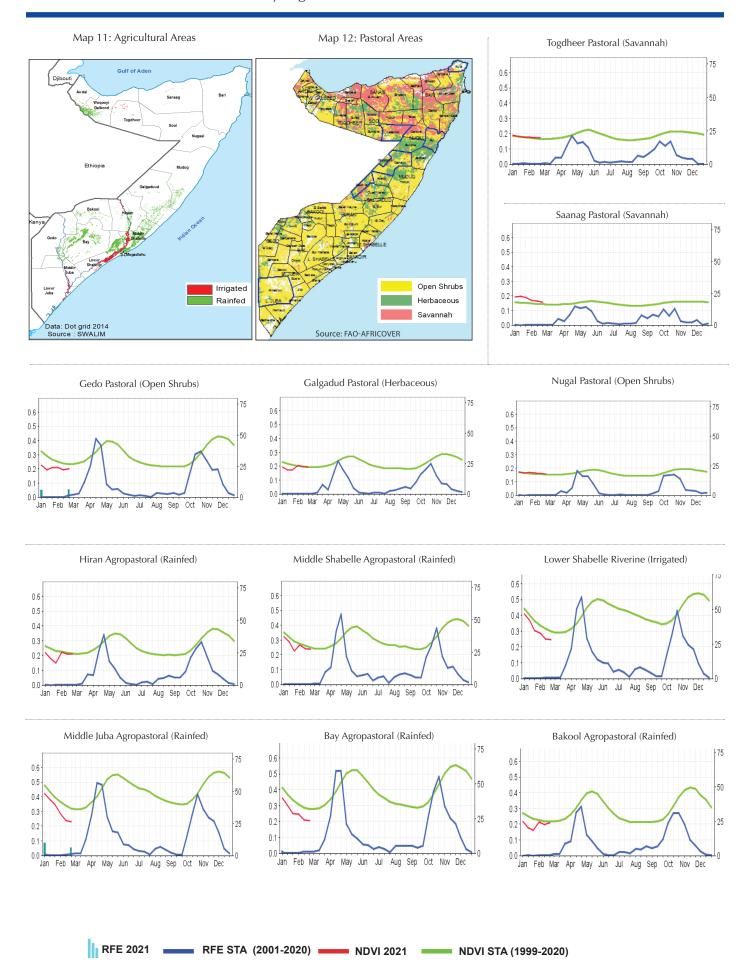
Seasonal Trend Graph

The maps and graphs on pages 3 and 4 are produced in collaboration with the FOODSEC Action of the Joint Research Centre of the European Commission. The graphs present seasonal trends of crop specific NDVI (Normalised Difference Vegetation Index) as lines and rainfall values (RFE) as bars for each of the delineated land cover and administrative units (regions and districts). For more information or request on available data, please send an email to: data@fsnau.org.

Primary data sources are NOAA/USGS, European Centre for Medium- range Weather Forecast (ECMWF), MARS-JRC, FSNAU and SWALIM. Maps and graphs on this bulletin are produced from four sources.

- Current Rainfall Estimates and NDVI data are derived from NOAA/CPC and DEVCOCAST (www.devcocast.eu) respectively, while the rain gauge data is collected by FAO-SWALIM and FEWSNET.
- The seasonal profiles on page 3 and 4 are produced in collaboration with JRC-MARS. For more information visit http://mars.jrc.europa.eu/mars/About-us/FOODSEC For more information on NDVI visit http://earlywarning.usgs.gov/adds and http://fsausomali.org/ fileadmin/uploads/1308.pdf
- This report is a compilation of climate data and field reports on Somalia that FSNAU and FEWS NET regularly review for analysis. For more information on data sources, please refer to page 2.

The TAMSAT informatio is available on http://www.met.reading.ac.uk/tamsat/about/



Seasonal rainfall and NDVI trends for selected districts

